

**REMARKS**

This is in full and timely response the non-final Office Action mailed on April 10, 2003. Reexamination in light of the amendments and the following remarks is respectfully requested.

Claims 1-83, 85-86, 88-89, 91-106 are pending in this application, with claims 1, 13, 23, 33, 45, 55, 65, 72, 78, 85, 86, 88, 89 and 91-106 being independent.

No new matter is added.

**Allowable subject matter**

Appreciation is expressed for the indication that claims 2, 4-8, 10-12, 14, 16-22, 24, 26-32, 34, 36-40, 42-44, 46, 48-54, 56, 58-64, 68, 70-71, 75, 77, 81-83, 85-86, 89 and 92-104 contain allowable subject matter.

Claims 85-86, 88-89 and 91-92 have been placed into independent form.

Note that no grounds for rejection of claims 88 and 91 have been provided within the non-final Office Action. (original) As a result, *claims 88 and 91 are deemed to also contain allowable subject matter.*

**Rejections under 35 U.S.C. §112**

Claims were rejected allegedly for various reasons under 35 U.S.C. §112, second paragraph.

This rejection is traversed at least for the following reasons.

The Office Action contends that the term "living body" found within claims 2, 4, 12, 14, 24, 34, 36, 46, 54, 68, 70, 75 and 81 lacks clarity. In response, the claims refer to a plurality of objects designed by an object-oriented design corresponding to the behavior of a living body.

In this regard, the specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication. *Bell Atlantic Network Services Inc. v. Covad Communications Group Inc.*, 59 USPQ2d 1865, 1870 (Fed. Cir. 2001).

Passages throughout the specification provide that "various elements related to the behaviors of a living body can be applied, such as the elements of behaviors of a living body (e.g., learning, thinking, recognition) and the means for performing the behaviors of a living body (limbs, joints, motion

control)" (page 12, lines 1-3). Moreover, the robot "can behave naturally like a living body having reality and a sense of living" (page 22, lines 2-3).

In response to the contention that the claims are replete with the phrase "adapted for", it is contended that the phrase "adapted for" is both clear and definite. Nevertheless, while not conceding the propriety of this rejection and in order to advance prosecution of the above-identified application, the claims have been amended by replacing "adapted for" with phrase "adapted to".

Withdrawal of this rejection is respectfully requested.

**Rejections under 35 U.S.C. §102**

Claims 1, 13, 23, 33, 45, 55, 65, 72, 78, 84, 87, 90 and 93 under 35 U.S.C. §102 as allegedly being anticipated by Hara et al., "Real-time Facial Interaction between Human and 3D Face Robot Agent", IEEE International Workshop on Robot and Human Communication, pp. 401-409, 1996 (Hara).

This rejection is traversed at least for the following reasons.

At least independent claims 1, 13 and 23 include an emotion module in which a plurality of emotion units representing various emotions affect one another to output an emotion.

While Hara arguably teaches a plurality of emotion units such as surprise, fear, anger, disgust, happiness, and sadness (figure 5, table 5 and photo 2), Hara fails to disclose, teach or suggest surprise, fear, anger, disgust, happiness, or sadness affecting one another to output an emotion. Instead, Hara arguably teaches individually outputting one of the surprise emotion unit, the fear emotion unit, the anger emotion unit, the disgust emotion unit, the happiness emotion unit, and the sadness emotion unit as the outputted emotion, without being affected by another of the emotion units. Table 7 of Hara is the result of a recognition test. Thus, the emotion units of Hara are individually output as discreet emotions.

At least independent claims 33, 45 and 55 include an instinct module in which a plurality of instinct units representing various instincts output individual instincts.

While Hara arguably teaches a plurality of emotion units, Hara fails to disclose, teach or suggest a plurality of instinct units. Thus, Hara fails to disclose, teach or suggest an instinct module in which a plurality of instinct units representing

various instincts output individual instincts.

The Office Action refers to photo 3 for the teaching of an instinct module. However, an instinct module is not found within figure 3. Instead, photo 3 shows two examples of facial expressions in response to recognition displayed on a subject (page 408). But assuming arguendo that photo 3 of Hara teaches an instinct module, Hara still fails to disclose, teach or suggest a plurality of instinct units, as claimed, since only a single function of facial recognition is disclosed.

At least independent claims 65, 72 and 78 include a plurality of emotion units, along with a plurality of instinct units.

But as shown hereinabove, both a plurality of emotion units and with a plurality of instinct units is absent from Hara.

Regarding claims 84, 87, and 90, while not conceding the propriety of this rejection and in order to advance prosecution of the above-identified application, claims 84, 87, and 90 have been canceled, rendering this rejection moot at least to claims 84, 87, and 90.

Regarding claim 93, the Office Action indicates that claim

93 is anticipated by Hara, while also objecting to claim 93 as containing allowable subject matter. (original) The Office Action lacks clarity in this regard, especially since claim 93 is already in independent form. (original) Accordingly, if the allowance of all claims is not forthcoming, then a new non-final Office Action is respectfully requested.

Withdrawal of this rejection and allowance of the claims is respectfully requested.

#### Conclusion

For the foregoing reasons, all the claims now pending in the present application are allowable, and the present application is in condition for allowance. (original) Accordingly, favorable reexamination and reconsideration of the application in light of the amendments and remarks is courteously solicited.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone Brian K. Dutton, Reg. No. 47,255, at 202-955-8753 or the undersigned attorney at the below-listed number.


If any fee is required or any overpayment made, the Commissioner is hereby authorized to charge the fee or credit the

overpayment to Deposit Account # 18-0013.

Respectfully submitted,



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